Emerging IT Skills Analysis 2024

Presented by Hassan Ali Hussein

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Executive Summary

 This project aims to analyze current and future trends in IT skills, focusing on programming languages, databases, and platforms to guide strategic planning.

 Our firm, known for its expertise in IT consulting, requires insights into these skills to maintain competitiveness and adapt to changing technologies.

Introduction

 As a Data Analyst at a global IT consulting firm, our role is to identify the most indemand programming skills to help the organization stay ahead in the industry.

 Data sources include job postings, training portals, and surveys, with a focus on programming languages, databases, and other technical skills relevant to our IT services.

Methodology

- 1. Data Collection: Gathered data from job postings, training portals, and surveys.
- 2. Data Wrangling: Cleaned and structured data for analysis.
- 3. Analysis: Used SQL, Python, and visualization tools to explore and analyze trends.
- 4. Visualization: Created dashboards and visualizations to summarize findings.

Analysis and Results

- 1. Programming Skills Trends:
- Key languages in demand: Python, JavaScript, SQL.

- 2. Database Trends:
- Current top databases: MySQL, PostgreSQL, MongoDB.

• 3. Demographic Insights:

Discussion

 The analysis highlights a growing demand for Python and SQL skills, essential for data and web development.

 Future skills such as React and MongoDB show a trend towards more advanced web and database technologies, indicating a shift in skill requirements.

Recommendations include investing in

Conclusion

 To remain competitive in the rapidly evolving IT sector, our firm must continue to upskill its workforce in high-demand programming and database skills.

 This analysis supports strategic hiring and training efforts to align with industry demands, ensuring sustained expertise in emerging technologies.

Appendix

 Additional charts, data visualizations, and technical notes are available upon request.

- Refer to the GitHub repository for full datasets and analysis notebooks:
- https://github.com/Ali-Katelo/IBM-CAPSTONE-FINAL-PROJECT